REMARKS

Upon entry of the foregoing amendment, claims 16-18 remain pending in this application with claim 16 being currently amended. Claims 1-15 were previously cancelled, and claims 19-27 were previously withdrawn. Support for the amendments may be found throughout the specification, and at least in fig. 8(a) and on page 18, line 20 to page 19, line 14. Thus, it is respectfully submitted that no new matter has been added by the amendments.

Amendments to the claims are being made solely to expedite prosecution and do not constitute an acquiescence to any of the Examiner's objections or rejections. Applicants' silence with regard to the Examiner's rejections of the dependent claims constitutes recognition by the Applicants that the rejections are moot based on Applicants' Amendment and/or Remarks relative to the independent claim from which the dependent claims depend. Applicants reserve the option to further prosecute the same or similar claims in the present or a subsequent application. Applicants respectfully traverse all rejections of record.

Rejection of Claims 16-18 under 35 U.S.C. § 102(b)

Claims 16-18 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Arman et al. (U.S. Patent No. 5,606,655) (hereinafter "Arman").

Amended independent claim 16 is directed to a method for dissolving an incoming scene and an outgoing scene of video information using a computer-based authoring and editing module. The incoming and outgoing scenes each include a sequence of fields or frames of compressed video information. The method includes the steps of (a) applying DCT domain motion inverse compensation to obtain DCT coefficients for all blocks of video information which make up a last frame of the outgoing video scene, (b) applying DCT domain inverse motion compensation to obtain the DCT coefficients for all blocks of video information which make up the first frame of said incoming video scene, and (c) creating a first frame in a dissolve region from said DCT coefficients of said last outgoing frame and said first incoming frame, said dissolve region being made playable as a transition between said outgoing and incoming scenes during playback of a video containing said outgoing and incoming scenes of video information.

Arman is directed to a computer implemented method for providing a representative frame (Rframe) for a group of frames in a video sequence including selecting a reference frame from the group of frames, storing the reference frame in a computer memory, defining a peripheral motion tracking region along an edge of the reference frame, and successively tracking movement of boundary pixels in the tracking region, symbolizing any of the length of the shot and the presence of any caption. (Arman, Abstract).

Arman neither discloses nor suggests a method for dissolving an incoming scene and an outgoing scene of video information including, among other steps, "creating a first frame in a dissolve region from said DCT coefficients of said last outgoing frame and said first incoming frame, said dissolve region being made playable as a transition between said outgoing and incoming scenes during playback of a video containing said outgoing and incoming scenes of video information" as recited in amended claim 16.

First, Arman neither discloses nor suggests "creating a first frame in a dissolve region from said DCT coefficients of said last outgoing frame and said first incoming frame." Arman merely describes that the Rframes are created from a video shot, a video shot being "the frames in between two consecutive scene changes" (i.e., a complete single scene). (*See* Arman, col. 9, lines 21-24). An Rframe is created from each video shot, first by selecting an Rframe body, the Rframe body being a frame arbitrarily chosen from the shot (i.e., in one embodiment, "the tenth frame" of the shot). (*See* Arman, col. 9, lines 31-33). Next, motion tracking regions are stacked on top of the Rframe body, the motion tracking regions being created by sub-sampling the shot "to select a few of the frames," and "[f]our slices, one from each side, of each selected frame are then stacked and an edge detection algorithm is applied to each of the four stacks." (Arman, col. 9, line 63 to col. 10, line 2). Additional statistical information, namely a time length indicator and a caption, are added to create the completed Rframe (Arman, col. 9, lines 29-30).

The Examiner alleges that "an Rframe reads upon the '...first frame...' of the instant invention because the Rframe is a frame generated across the interval of frames in a shot region," and "[w]hen the shot region contains a dissolve as a scene change and when DCT coefficients from the frames in the shot region as [sic] used to represent features of the shot in an Rframe, the '...creating a first frame in a dissolve region from said DCT coefficients of said last outgoing

frame and said first incoming frame…' is met." (Office Action, page 3) (citations omitted). Applicants respectfully disagree.

Since, as described above, each Rframe is created from a single video shot (i.e., a complete single scene), the Rframe cannot be created "from said DCT coefficients of said last outgoing frame [of said outgoing scene] *and* said first incoming frame [of said incoming scene]" (emphasis added). Further, even if the system of Arman were used on a shot containing a dissolve to create an Rframe (which is neither disclosed nor suggested by Arman), the result would not be "creating a first frame in a dissolve region" because (in this hypothetical situation proposed by the Examiner) such a dissolve region would already exist in the scene. Rather, the Rframe would, like all Rframes described by Arman, merely be a representative frame of the entire scene.

Second, Arman neither discloses nor suggests "said dissolve region being made playable as a transition between said outgoing and incoming scenes during playback of a video containing said outgoing and incoming scenes of video information." The Examiner alleges that "the Rframes are viewable by user, and further the Examiner notes that Arman clearly discloses viewable (i.e., playable) during the playback of the video sequence as a navigational aid in content based browsing (i.e., video sequence playback) as in the claims." (Office Action, page 3) (citations omitted). Applicants respectfully disagree.

Contrary to the Examiner's assertion that the Rframes are viewable by the user during playback of the video sequence, Arman describes the purpose of creating the Rframe abstractions as follows:

> Consider, for instance, the case in which the user has submitted a query to a remote database and the database search has resulted in the offer of several possibilities. At this point the user must decide if the context and contents of the returned videos match the requirements. This may only be achieved by viewing each of the returned videos. Viewing video would require that each video be retrieved from, typically, a hierarchical storage system, transmitted over the network in its entirety as the user plays the video or, at most, fast forwards and rewinds. This process is time consuming, inefficient, not cost effective, and wasteful of bandwidth.

(Arman, col 6, lines 11-23). Because of these problems, Arman proposes the creation of abstractions of each of the video sequences (i.e., the Rframes).

> Abstractions of each of the video sequences are pre-computed and the abstractions are retrieved from the system, transmitted, as may be needed, and viewed by a user. The abstractions are many orders of magnitude smaller in size than the video sequences themselves, and thus, the system's response time, bandwidth needs, and, most importantly, the user's viewing time are reduced. In addition, the proposed system allows the user to rapidly pinpoint a desired location within a video sequence.

(Arman, col. 6, lines 24-32). Finally, Arman describes that the benefit to the user of viewing the abstractions created from the video sequences is to eliminate *viewing the entire video sequence itself.*

> This methodology is superior to the current techniques of fast forward and rewind because *rather than using every frame to view and judge the contents, only a few abstractions are used.* Therefore, the need to retrieve the video from a storage system and to transmit every frame over the network in its entirety no longer exists, saving time, expenses, and bandwidth.

(Arman, col. 6, lines 61-67) (emphasis added). Thus, Arman clearly describes that the Rframes are viewed *instead of* viewing the video sequence in its entirety. Accordingly, the Rframes are not viewed during playback of the video sequence because doing so would require downloading of the entire video sequence and obviate the need for the Rframes, as described above by Arman.

Further, Arman is silent about the Rframes being viewed as a transition between two scenes, but rather are viewed as a representation of a single scene. Therefore, even if the Rframes could amount to "a first frame in a dissolve region," (which Applicants submit they do not), Arman neither discloses nor suggests "said dissolve region being made playable as a transition between said outgoing and incoming scenes during playback of a video containing said outgoing and incoming scenes of video information."

Thus, Applicants respectfully submit that Arman neither discloses nor suggests "creating a first frame in a dissolve region from said DCT coefficients of said last outgoing frame and said first incoming frame, said dissolve region being made playable as a transition between said

outgoing and incoming scenes during playback of a video containing said outgoing and incoming scenes of video information" as recited in amended claim 16. Therefore, as Arman fails to disclose all of the features of claim 16, it is respectfully submitted that the rejection of claim 16 is overcome and should be withdrawn.

Claims 17 and 18 are dependent on claim 16 and are not anticipated by Arman for at least the reasons set forth above regarding claim 16. Therefore, it is further respectfully submitted that the rejections of claims 17 and 18 are overcome and should be withdrawn.

CONCLUSION

On the basis of the foregoing Amendments and remarks, Applicants respectfully submit that the pending claims of the present application are allowable over the prior art of record. Applicants thus respectfully request the previous rejections and objections be withdrawn, and that the pending claims be allowed by the Examiner. Favorable consideration and timely allowance of this application are respectfully requested. In the event that the application is not deemed in condition for allowance, the Examiner is invited to contact the undersigned at (212) 408-2538 in an effort to advance the prosecution of this application.

No additional fee is believed due. However, if a fee is due, please charge the additional fee, or credit any overpayment, to Deposit Account 02-4377.

Respectfully submitted,

Dated: March 10, 2010

By: _____

Robert L. Maier, Esq.
Registration No. 54,291
BAKER BOTTS, L.L.P.
30 Rockefeller Plaza
New York, NY 10112

Attorney for Applicants
Tel: (212) 408-2538
Fax: (212) 259-2538